### APPENDIX I -- LOCAL INFORMATION

### I.1 ALASKA

# **Alaska History**

The lives of early Alaskans remained basically unchanged for thousands of years, until Russian sailors led by Danish explorer Vitus Bering sighted Alaska's mainland in 1741. The Russians were soon followed by British, Spanish, and American adventurers. But it was the Russians who stayed to trade in the pelts of sea otters and other fur-bearing animals, interjecting their own culture and staking a strong claim on Alaska. Once the fur trade declined, however, the Russians lost interest in this beautiful, though largely unexplored, land.

In 1867, U.S. Secretary of State William H. Seward offered Russia \$7,200,000, or approximately two cents per acre, for Alaska. At the time, some Americans scoffed at the purchase, calling Alaska "Seward's Folly" or "Seward's Icebox." The official transfer of Alaska to the United States occurred on October 18, 1867, in ceremonies at the Russian capital of Sitka.

Gold was discovered in Alaska as early as 1880. But the big gold rush came in 1897, when the cry of "Gold" screamed across newspaper headlines worldwide, and more than 100,000 fortune hunters swarmed to the Klondike gold fields in Canada's Yukon. As gold was discovered in Nome, Fairbanks, and other locations, frontier mining towns sprang up throughout Alaska. Exaggerated stories about the lawlessness of these towns underscored the need to bring law and order to America's frontier. The adoption of a code of laws and the establishment of a court system in 1900 was the first step in a long journey that ultimately led to statehood.

World War II brought roads (including the famous Alaska Highway), airports, and harbors to Alaska, providing easy access to once remote outposts. In the next fifty years, fledgling timber, fishing, and mining industries began to flourish. In 1958, the Alaska statehood measure was finally passed by Congress, granting Alaska official status as the 49th state on January 3, 1959. The Alaska Legislature has designated 1994-2004 as the Gold Rush Centennial Decade. Towns and cities throughout the state will hold special observances in remembrance of the Gold Rush.

Today, the fascination with the forty-ninth state continues. Visitors are drawn to Alaska by its breathtaking scenery and the diversity of its wildlife, which includes numerous big animals. The southern part of the state has many bears (notably the Alaskan brown bear, the world's largest carnivorous land mammal) and deer; large herds of fur seals are found on the Pribilof Islands. Alaska has herds of moose, caribou, and reindeer, some domesticated musk-oxen, and mountain goats and sheep. Arctic Alaska has polar bears, caribou, and arctic foxes. The state's numerous streams are well stocked with trout, salmon, grayling, and other fish, and coastal marine waters contain abundant salmon, halibut, cod, herring, pollack, shrimp, clams, and crabs as well as whales.

# The People of Alaska

There are seven distinct Native cultures in Alaska, and dozens of sub-cultures. The majority of the native population belongs to one of the two Eskimo groups, the Inupiaq and the Yupik, which live mostly along the state's coasts. They support themselves in part by

catching fish and sea mammals and by herding reindeer. The American Indian groups include the Athabascan Indians of the Interior and the Haida, Tlingit, and Tsimshian Indians of the Inside Passage. The Aleut, closely related to the Eskimo, live on the Alaska Peninsula and on the Aleutian and Shumagin Islands. As of 1990, the combined population of American Indian, Eskimo, and Aleut was 85,698.

The state's total resident population in the 1990 census was 550,043. Alaska is one of the least populous of the U.S. states, but its population grew rapidly in the 1980s, increasing more than 36%, or nearly four times the national increase, during that period. The growth resulted from a significant natural increase and from some in-migration. Large in-migration had occurred in the 1970s when many persons entered the state to work in the petroleum industry or in jobs associated with oil production and transportation. Continuing into the 1980s, this trend abruptly halted in the mid-1980s -- and actually reversed, with some regions experiencing a net outflow of population because of the drop in oil revenues.

Only seven Alaskan communities are of significant size--Anchorage, Fairbanks, Juneau (the state capital), Kenai, Ketchikan, Sitka, and Kodiak. Some of these cities experienced a rapid pace of growth in the 1970s, and all continued to grow during the 1980s. Some smaller places, such as Barrow, Nome, Valdez, Bethel, Petersburg, Seward, and Wrangell (most with fewer than 4,000 inhabitants in 1990), are regional economic centers.

### **Interior Alaska**

Alaska's Interior is a vast region which contains some of the state's most impressive natural wonders. Figure I.1-1 is a map of Alaska. The mighty Yukon, Alaska's longest river, flows 1,875 miles from the historic Klondike to the Bering Sea and courses through the middle of the region.

Located in Denali National Park and Preserve, majestic Mount McKinley's 20,320-foot peak dominates the region's southern landscape. The 6-million-acre national park contains North America's largest mountain, along with 37 species of animals and 155 species of birds. The George Park Highway and the Alaska Railroad link Fairbanks with Denali National Park and Anchorage.

Alaska's northern lights, the *aurora borealis*, may be seen from late August through April. One of nature's most inspiring sights, they appear mostly on cold, clear nights. Alaska Natives believed they saw the souls of their ancestors in these shimmering curtains of yellow, green and red light. Turn of the century gold rush prospectors believed the colors were rising from the Mother Lode. Mystical and unpredictable, these sheets of light inspire lasting Alaska memories.

The Interior's attractions and natural wonders are accessible by air, rail, or highway.

# Alaska Highway

The Alaska Highway is the only road link between Alaska and the Lower 48 states. For many visitors, driving the Alaska Highway is the crowning event of an Alaska vacation. Originally 1,523 miles of gravel road, it is now entirely paved and takes you past spellbinding scenery, rustic communities, and roadhouse lodges that offer old-time Alaska charm.

Figure I.1-1 Map of Alaska



When traveling the Alaska Highway, Tok is the first major point of interest. Located between the Tanana River and the Alaska Range, Tok serves as a trade center for six Athabascan Native villages. Gift shops abound in Native crafts and beadwork, and several hotels and restaurants cater to travelers.

Twenty miles east of Tok, visitors can drive north along the Taylor Highway and visit the gold rush transportation center of Eagle, where you will find the park headquarters for the Yukon-Charley Rivers National Preserve. From Eagle, try a float trip down the Yukon River to Circle or cruise by catamaran to picturesque Dawson City in Canada's Yukon.

Delta Junction is the official northern end of the Alaska Highway. From Delta Junction you can visit glaciers, catch a glimpse of the Trans-Alaska Pipeline, pick wild berries from July through September, fish for arctic grayling, and see bison roaming the Delta Bison

Range. Visit Alaska's largest agricultural area and experience incredible panoramic views of the Alaska Range.

Visitors to the Delta area can enjoy a visit to Big Delta State Historical Park. A museum in the park features period photographs, pioneer relics, and Athabascan Native artifacts. Delta offers several motels, RV parks, and visitor services. In addition, there are four state recreation sites you can access from the Richardson Highway.



# Mt. McKinley and Denali National Park and Preserve

Mount McKinley, at 20,320 feet, is North America's highest mountain. The Athabascan natives called it Denali, "the High One," and in 1980, the national park's name was changed to Denali. Mount McKinley is a massive mountain and the towering centerpiece of the glacier-strewn Alaska Range. Under its shadow in Denali National Park and Preserve are barren-ground caribou, grizzly bears, wolves, moose, Dall sheep, and other wildlife. Meandering, glacier-born rivers laden with silt (or rock flour) create natural dams and periodically change course across their wide, flat valleys. Much of the park's scant tree growth lies in the river valleys. At higher elevations are large expanses of tundra, a fascinating world of dwarfed shrubs and miniature wildflowers.

From Fairbanks, travel the scenic George Parks Highway to Mt. McKinley and Denali National Park and Preserve by car, motorcoach, air taxi, or the Alaska Railroad. To protect wildlife and to preserve opportunities to see it, the use of private vehicles is restricted on the park road. A shuttle bus service operates within Denali along the 85-mile wilderness road from the park entrance to Wonder Lake. The shuttle bus will drop you off or pick you up at points along the park road. Denali offers hotels, campgrounds, and visitor programs. Recreational activities include hiking, rock and ice climbing, photography and wildlife viewing, nature walks, slide programs, sled dog demonstrations, and cross-country skiing (in season), along with ground and flightseeing tours.

Take a shuttlebus or guided tour into the park's wilderness to see caribou, grizzly bears, wolves, moose, Dall sheep, lynx, ground squirrels, marmots, fox and snowshoe hares. The majority of the park's birds visit during summer, but year-round residents include ravens and great horned owls, as well as white-tailed, rock, and willow ptarmigan. Additional park highlights include Wonder Lake, Savage River Canyon, Polychrome Pass, the Outer Range, Sanctuary River, Glacier, and the Kantishna Hills - all of which can be seen from the 90-mile road that traverses the park.

The adjacent Denali State Park is famous for its panoramic views of Mt. McKinley and the Alaska Range. The Denali Highway will take you through the Alaska Range from the edge of Denali National Park to Paxson. From this junction you can continue north to Fairbanks or south to Anchorage.

### I.2 FAIRBANKS

### **Origin of Fairbanks**

When the Territory of Alaska was purchased from Russia in 1867, little was known about Alaska and even less about the Interior. The first successful expedition into the Interior

wasn't until 1885. Lt. Henry Allen's journey took him two years to complete. He traveled more than 1,500 miles and mapped the Copper, Tanana, Yukon and Koyukuk rivers. The explorer was the first white man many of the Native Alaskans he encountered had ever seen. It was thirteen years before other white men explored Alaska's interior and an additional five years before the birth of Fairbanks.

As gold miners headed into the Klondike, there were a hardy few who decided to make their way into Alaska, some searching for gold in the hills of the Tanana valley. There were few trading posts then, and the nearest one to the Tanana valley was in Circle City, over one hundred miles away. Capitalizing on this situation, E. T. Barnette set out to establish a trading post at present-day Tanacross. However, due to unexpected shallows, the riverboat on which Barnette was traveling was unable to continue down either the Tanana or Chena rivers. The riverboat captain decided to put Barnette ashore, along with his large stock of trade goods. Barnette was initially not pleased with the prospect of establishing his trading post so far from the existing gold fields. However, the appearance of several local prospectors, drawn by the smoke of the riverboat, made him realize that there was money to be made at this location. It was a fortunate decision, as three months later miners found gold in the area.

From that moment on, Barnette focused on making the best of his accidental landing and built his city by sheer force of personality. He convinced early residents to name Fairbanks in honor of Indiana senator Charles W. Fairbanks (later Vice President of the United States under Teddy Roosevelt), a friend of territorial Judge James Wickersham. Within five years Fairbanks was the largest and busiest city in Alaska. From these meager beginnings, the population of the city of Fairbanks has now grown to over 32,000 inhabitants (over 85,000 in the metropolitan area).

A product of the Gold Rush, Fairbanks has grown into a bustling trade and transportation center for Interior and Far North Alaska. Alaska's second largest city (Anchorage being the largest) is home to the University of Alaska's main campus, as well as both Army and Air Force installations. A mix of modern city and age-old traditions, Fairbanks is the gateway to Alaska's past and its future.



# THINGS TO DO IN FAIRBANKS

A sample of activities in and around Fairbanks for which information is available on the internet:

Alaskan Airboat Adventures	El	Dorado	Gold	Mine
Phone: 907-479-0378	1975	Disco	overy	Drive
http://www2.polarnet.com/~airboat	Phone:		907-	479-7613

http://www2.polarnet.com/~discovry

Alaskaland

Off Airline Way

http://www.newsminer.com/visitor/akland.

html

Alaska Railroad Scenic Rail Tours

Daily and overnight tours to Denali

Phone: 800-544-0552

http://www.akrr.com/akrrpshp.html

Alaska Salmon Bake

In Alaskaland

Phone: 907-452-7274

http://www.akpub.com/akttt/salmo.html

Dynamic Aurora, University of Alaska Museum

Phone: 907-474-7505

http://zorba.uafadm.alaska.edu:80/museum

**Ester Gold Camp** 

PO Box 109, Ester Phone: 907 479-2500

http://www.akpub.com/akttt/ester.html

**Interior AK Adventures** 

269 Topside Rd

Phone: 907-388-4193

http://www.akpub.com/fhwag/logan.html

**Riverboat Discovery** 

1975 Discovery Drive Phone: 907-479-6673

http://www2.polarnet.com/~discovry

7 Bridges, Boats, and Bikes/Arctic 7 Rentals

Phone: 907-479-0751

http://www.akpub.com/akttt/7gabl.html

### Alaskaland

Take an entertaining and educational look at early Fairbanks by visiting Alaskaland, a 44-acre theme park that mixes historical information with today's sense of humor. The park has a slice of just about everything in Alaska, from a salmon bake to a Native village. The park has three museums, an antique merry-go-round and an old-time saloon.

Located near downtown Fairbanks off Airport Way, Alaskaland Pioneer Park was built for the Alaska 1967 Centennial Exposition. A total of 29 cabins were moved to the site to form Gold Rush Town. The cabins form a unique walk through Fairbanks' history. They include the Kitty Hensley House, Judge Wickersham's House, Doc Stearn's cabin, the original First Presbyterian Church, Nick Nagengast's cabin, Skagway Jim's cabin, E.H. Mack's cabin, Georgia Lee's house, Bill Sherwin's home and Alex McRae's dream cabin.

In addition to Gold Rush Town, Alaskaland includes an RV campground, two 18 hole miniature golf courses, covered picnic shelters and a large grassy field and playground area for travelers to stretch their legs and relax. The park is open through Labor Day.

### Other points of interest

Considered one of the top attractions in the state, the University of Alaska Museum features exhibits on Alaska's regions, wildlife, and Native culture.

Creamer's Field, located two miles from downtown, is a waterfowl refuge for ducks, geese and cranes during their spring and fall migrations. Some of Alaska's loveliest scenery can be observed in the fall when the birch forests surrounding Fairbanks turn to gold.

Throughout the year, caribou can often be seen just outside of Fairbanks. They've even been known to wander through town.

Popular regional activities include cruising the Chena and Tanana rivers on an authentic sternwheeler, canoe, or raft; observing musk oxen, caribou, and reindeer at the university's Large Animal Research Station; and touring a gold dredge and mine.

Drive to the bubbling mineral waters at Manley, Circle, and Chena hot springs; view a portion of the Trans-Alaska Pipeline; and visit the community of North Pole, where the U.S. Post Office traditionally sends Santa's mail to be answered by his elves.

A fly-in excursion to Fort Yukon on the Arctic Circle gives you a sampling of life on the Yukon River, in Alaska's largest Athabascan village.

### **Fairbanks Climate**

Period of Record: 9/01/1949 to 1/31/1997

	Monthly Averages (° F)		Extremes (° F)		Average Number of Days:			
	Max.	Min.	Mean	High	Low	Max >= 90° F	Max <= 32° F	Min <= 32° F
April	42.0	20.1	31.0	74	-24	0.0	6.0	27.0
May	59.9	37.6	48.7	89	-1	0.0	0.1	6.8
June	70.7	48.9	59.8	96	30	0.3	0.0	0.0

	<u>Apr</u>	<u>May</u>	<u>Jun</u>
Average Total Precipitation (in.)	0.25	0.5	1.39
Average Total Snow Fall (in.)	3.1	0.7	0.0
Average Snow Depth (in.)	10	0	0

Additional Alaska climate information can be found on the Alaska Climate Research Center webpage, http://climate.gi.alaska.edu/weather/tourist/information.html



# Ah Sa Wan

Madarin, Szechwan and Shanghai 600 Old Steese Highway, Fairbanks

Phone: 907-451-7788

### Alaska Salmon Bake

King salmon, halibut and ribs In Alaskaland Park Airport Way, Fairbanks Phone: 907-452-7274 intrasea@polarnet.com http://www.akpub.com/akttt/salmo.html

# **Campbell House Restaurant**

Seafood, steaks, prime rib, chicken

# **Dining**

# Peking Garden

Mandarin and Szechuan 1101 Noble Street, Fairbanks Phone: 907-456-1172

### Pike's Landing

Seafood, steak, prime rib
4.5 Mile Airport Way, Fairbanks

Phone: 907-479-7113

# Plate and Palette Gallery Cafe

Continental and vegetarian cuisine 310 First Avenue, Fairbanks

Phone: 907-451-9294

**Pump House Restaurant** 

2227 Old Steese Highway, Fox

Phone: 907-457-7462

The Castle

Steaks, seafood, prime rib 4510 Airport Way, Fairbanks

Phone: 907-474-2165

The Dog House Pub-style vittles

3412 College Road, Fairbanks

Phone: 907-479-0099

The Edgewater at Fairbanks Princess

Hotel

Steaks, prime rib, seafood 4477 Pikes Landing Road, Fairbanks

Phone: 907-455-5024

The Food Factory

Sandwiches and burgers 18th and Cushman, Fairbanks

Phone: 907-452-6348

Gambardella's Pasta Bella

Italian, pizza, seafood, subs 706 Second Avenue, Fairbanks

Phone: 907-456-3417

Golden Shanghai

Mandarin, Szechwan, Cantonese 1900 Airport Way, Fairbanks

Phone: 907-451-1100

**Hot Licks Homemade Ice Cream** 

Calzone, lasagna, sandwiches 3549 College Road, Fairbanks

Phone: 907-479-7813

Seafood, steak, prime rib

1.3 Mile Chena Pump Road, Fairbanks

Phone: 907-479-8452

http://www2.polarnet.com/~pumphse

Soapy Smith's Pioneer Restaurant

Steaks, seafood, sandwiches

543 2nd Avenue, Fairbanks AK

Phone: 907-451-8380

Souvlaki

Mediterranean and American food 112 North Turner, Fairbanks

Phone: 907-452-5393

**Turtle Club** 

Prime rib, seafood, BBQ ribs 10 Mile Old Steese Highway, Fox

Phone: 907-457-3883

Two Rivers Lodge

Prime rib, beef, seafood

4968 Chena Hot Springs Road, Fairbanks

Phone: 907-488-6815

The Vallata

Italian and American cuisine 2190 Goldstream Road

Phone: 907-455-6600

Whole Earth Grocery and Deli

Vegetarian and organic food 1157 Deborah Street, Fairbanks

Phone: 907-479-2052

Hotels

Fax:

Sophie Station Hotel 1717 University Ave Fairbanks AK 99709

Phone: 907-479-3650

800-528-4916 907-479-7951

http://www.mosquitonet.com/~fountain

Wedgewood Resort 212 Wedgewood Drive Fairbanks AK 99701 Phone: 907-452-1442

800-528-4916 Fax: 907-451-8184

http://www.mosquitonet.com/~fountain

I.3 BARROW

(Information courtesy of the Atmospheric Radiation Measurement Program's NSA/AAO Site homepage (www.arm.gov/docs/sites/nsa/nsaaao.html) and related links. Additional information provided by Barrow residents John and Meki Selman.)

### Community Profile

Community Type: 1st Class City

Current Population: 4276

Borough Name:
Regional Native Corporation:
REAA/School District:

North Slope Borough
Arctic Slope Regional Corp.
North Slope Borough Schools

### Location

Barrow (Lat. 71° 17' N, Long. 156° 14' W) is the northernmost community in North America. It is located on the Chukchi Sea coast, 10 miles south of Point Barrow from which it takes its name. It lies 725 air miles from Anchorage.

# **Community Information**

Barrow is named for Sir John Barrow, 2nd Secretary of the British Admiralty. Barrow was known by natives as Ukpeagvik (place where owls are hunted.)

Archaeological sites in the area indicate habitation from 500 to 900 A.D. Sixteen dwelling mounds from the Birnirk culture remain today.

The Cape Smythe Whaling and Trading Station was constructed here in 1893.

Bowhead, gray, killer and beluga whales migrate near Barrow each summer.

# **Economy**

Barrow is the economic center of the North Slope Borough, the city's primary employer. Numerous businesses provide support services to oil field operations. State and federal agencies also provide employment. The midnight sun has attracted tourism, and arts and crafts provide some cash income. Five residents hold commercial fishing permits.

### Culture

The majority of residents are Inupiaq Eskimos. The Inupiaq traditionally depend on subsistence marine mammal hunting, supplemented by inland hunting and fishing, practices which are an active part of the culture.

### Transportation

Regularly-scheduled jet services provide Barrow's only year-round access. Alaska Airlines is the only commercial passenger airlines; Alaska Air and Northern Air Cargo provide the only cargo planes. The state-owned Wiley Post-Will Rogers Memorial Airport serves as the regional transportation center for the borough. The airport has recently undergone major improvements. Marine and land transportation provide seasonal access. In addition, the city has requested funds for construction of a small boat harbor.

### Hotels

There are several places to stay while in Barrow. During most of the year, and especially during the tourist season (June - September), these motels may be full. Please plan accordingly.

Top of the World Hotel (907) 852-3900

Barrow Airport Inn (907) 852-2525

UIC NARL Hotel (907) 852-2361 (dormitory, communal bathrooms)

### Restaurants

For a small town, Barrow has many establishments that will provide a fine meal.

Pepe's North of the Border UIC NARL Cafeteria

Mexican food Breakfast, lunch, and dinner

Next to Top of the World Hotel (The only place to eat at UIC NARL)

(907) 852-8200 **Teriyaki House** 

Northern Lights
Oriental, American
Chinese American and Pizza
(907) 852-2276

Chinese, American and Pizza (907) 852-2276
Recommended by our local contact

(907) 852-3000

Ken's

Breakfast, Chinese

Arctic Pizza Local contact comment: "pretty good greasy

Italian, American, pizza place"

(907) 852-4222 (907) 852-8888

A new establishment, King Eider Inn, should be open by the time the mission starts. It should be the nicest restaurant in Barrow. Also, the new building being constructed for the Alaska Commercial facility will also contain a Burger King and a Pizza Hut.

# Shopping

Alaska Commercial is the primary store in Barrow. Other stores mentioned by our local contact are Arctic Coast Trading Post and Arctic Grocery. Be prepared for prices that are significantly higher than what you might expect in the lower 48 states. Remember, everything is flown in.

In Barrow, hardware may be purchased from Spenard Builders Supply (at UIC/NARL), Alaska Commercial (aka Stauqpuk), and NAPA Auto Parts. If you can't find it in Barrow, you can call many places in Fairbanks or Anchorage and it will be air shipped either the same day or the next day.

### **Health Facilities**

Local Health Clinic: PHS Alaska Native Hospital/Barrow Service Unit

Clinic Owner: U.S. Public Health Service

Clinic Phone: 907-852-6682

Alternative Care: Barrow Volunteer Fire Department

907-852-0307 or 907-852-0234

NSB Search & Rescue/Fire Department/Medevac

907-852-0307 or 907-852-6111

The hospital is a qualified Acute Care facility and state-certified Medevac service. NSB Search & Rescue provides critical care air ambulance service.

### Visitor Attractions

Arctic Ocean Point Barrow

Cape Smythe Whaling Station Birnirk archaeological site

Barrow Museum

The Will Rogers and Wiley Post Monument, across from the airport, commemorates the 1935 airplane crash that killed both the American humorist and the famous pilot. Two other monuments, located at the crash site 15 miles south of town, are on the National Register of Historic Places.

In April and May, visitors can often see Eskimos heading for whaling camps.

A movie theater is located in the school auditorium.

### Climate

The climate of Barrow is arctic. Precipitation is light, averaging 5 inches yearly, and 20 inches of snowfall. Temperatures range from -56 to 78, averaging 40 during summer. The sun does not set between May 10th and August 2nd each summer, and does not rise between November 18th and January 24th each winter. Additional Alaska climate information can be found on the Alaska Climate Research Center webpage, http://climate.gi.alaska.edu/weather/tourist/information.html

Period of Record: 9/02/1949 to 1/31/1997

	Monthly Averages (° F)		Extremes (° F)		Average Number of Days:			
	Max.	Min.	Mean	High	Low	Max <= 32° F	Min <= 32° F	Min <= 0° F
April	6.1	-7.9	-0.9	38	-38	29.3	29.9	22.6
May	24.6	14.8	19.7	47	-19	25.9	30.8	2.8
June	38.4	29.7	34.1	72	4	4.3	23.5	0.0

	<u>Apr</u>	<u>May</u>	<u>Jun</u>
Average Total Precipitation (in.)	0.18	0.15	0.33
Average Total Snow Fall (in.)	2.5	1.9	0.7
Average Snow Depth (in.)	11	6	1



### ALASKA STATE SYMBOLS



TREE: Sitka Spruce FISH: King Salmon

GEM: Jade MINERAL: Gold

SPORT: Dog Mushing
BIRD: Ptarmigan
FLOWER: Forget-me-not
MOTTO: North to the Future
SONG: The Alaska Flag Song

NICKNAME: The Great Land

CAPITAL: Juneau

ALASKA FACTS

STATE FLAG: Eight stars of gold on a field of blue, representing the Big Dipper

and the North Star.

ADMITTED TO THE UNION:

January 3, 1959 as the 49th State

STATE 570,000 (July 1991)

POPULATION:

COASTLINE: 47,300 miles (longer than the coast of the rest of the United States)

LAND AREA: 586,412 square miles or about 365,000,000 acres (about 1/5th the

size of the entire Continental United States and more than twice the

size of Texas)

WATER AREA: 3 million lakes, more than 3,000 rivers

LARGEST CITY - POPULATION: Anchorage, population 250,000 (1995)

LARGEST CITY

- AREA:

Juneau with 3,108 square miles (largest city in square miles in

North America).

**OLDEST** Erskine House in Kodiak, built by the Russians between 1793 and

BUILDING: 1796

EMPLOYMENT: Oil/gas, fishing, tourism and government are the largest employers

in the State.

**CROSSING** No passport needed - Canada requires proof of automobile

THE BORDER:

insurance. Sport fishing fees for non-residents are \$10 for a 1- day permit, \$15 FISHING AND

HUNTING LICENSES: for a 3-day permit, \$30 for a 14-day license and \$50 for an annual license. Non-resident hunting license is \$85; however, there are additional charges for big game tags. A combination sport fishing and hunting license is \$135 annually. For more information, Alaska Department of Fish and Game, Division of

Licensing: PO Box 3-2000: Juneau. Alaska 99802-2000:

(907) 465-2376.

Wood-Tikchik State Park with 2.5 million acres of wilderness -LARGEST

STATE PARK: located in the Bristol Bay area (the largest state park in the nation).

LARGEST Along Chilkat River, just north of Haines. Nearly 4,000 bald eagles CONCENTRATION gather here in fall and winter months for late salmon runs. This is

OF BALD EAGLES: the largest concentration of these birds in the world.

LARGEST FRESH

WATER LAKE:

Iliamna - 1,150 square miles

EXTREME TEMPS: Highest: 100° F at Fort Yukon, 1915;

Lowest: -80° F at Prospect Creek Camp, 1971

TYPICAL According to 1990 census figures, 28.9 years old and male - this ALASKAN:

compares to 32.3 years for the United States. About 52 percent of

Alaskans are male, the highest percentage of any state.

PER CAPITA INCOME:

\$23,788 in 1990, 8th highest in the nation.

**MEDIAN** HOUSEHOLD INCOME:

\$41,408 in 1989 (latest available), second highest in the nation.

LIQUOR LAWS:

Alaska's drinking age is 21. Alcohol is available in liquor stores and bars in many towns. Some villages are "dry" and it is against the law to transport liquor into them, even for personal

consumption.

TIME ZONE: Almost all of Alaska is in the Alaska Time Zone, which is one hour

> earlier than Pacific Time. The westernmost Aleutian Islands and St. Lawrence Island are on Hawaii-Aleutian Time, two hours earlier

than Pacific Time.

SPEED LIMITS: The speed limit on Canadian portions of the Alaska Highway is 50

> miles per hour, and on non-urban Alaska highways, 55 miles per hour. The state has stiff fines and penalties for littering or driving

while intoxicated.

**HOLIDAYS**: In addition to all U.S. holidays, Alaska observes Seward's Day, the

> last Monday in March, which commemorates the signing of the treaty by which the United States purchased Alaska from Russia in 1867; and Alaska Day, October 18th, the anniversary of the formal

transfer of Alaska from Russia.

### Did you know...

Juneau, Alaska's capital city, has no road access and can only be reached by air or water.

Fairbanks enjoys more than 20 hours of daylight from mid-May through July.

Wrangell is the only Alaskan city to have existed under four nations and three flags: the Stikine Tlingit Nation, Russia, Britain and the United States.

Mount McKinley is North Americas largest peak at 20,320 feet. Of the 20 highest peaks in the United States, 17 are in Alaska.

The Yukon River, almost 2000 miles long, is the third longest river in the U.S.

When the sun rises in Barrow on May 10, it does not set again for nearly three months. When it sets on November 18, Barrow residents do not see the sun again for more than two months.

Known as the "Emerald Isle", Kodiak is the largest island in Alaska and the second largest in the United Sates.

The Richardson Highway was Alaska's first road, known to gold seekers in 1898 as the "Valdez to Eagle Trail".

There are six distinct natural regions that make up the state of Alaska: the Interior, the Arctic, the Bering Sea Coast, the Alaskan Peninsula, the Aleutian Chain, South Central Alaska, and South Eastern Alaska.

The shortest distance separating North America from Asia is between Big and Little Diomede Islands.

The Turnagain Arm is known for having one of the worlds fastest tides. With a diurnal range of more than 33 feet in 10 minutes, it produces a bore tide which is a wall of water reaching up to five feet in height.

The heaviest one-year snowfall total was 974.5 inches (over 81 feet) at Thompson Pass near Valdez during the winter of 1952-53.

Powerful and unpredictable, bears should be treated with respect and caution. Follow park guidelines while in the back country. Bears are seen throughout Alaska, even in city parks in Anchorage.

Alaska's largest bear is the Kodiak Brown Bear.

The moose is the largest member of the deer family.

Caribou are the only deer in which both sexes grow antlers.

There are at least 25 species of mosquitoes in Alaska. The pests are present from April through September in many areas of the state.

# APPENDIX J: ARCTIC CLOUD MISSION PARTICIPANT LIST

For corrections or changes to any entry, please contact the SAIC FIRE Project Office at 757-827-4859 or e-mail e.n.harper@larc.nasa.gov

Dr. Robert F. Abbey Jr.
Office of Naval Research
Marine Meteorology Research
Code 1122 MM
800 North Quincy Street
Arlington, VA 22217
Phone: 703-696-6598
Fax: 703-696-3390
abbeyr@onr.navy.mil

Dr.Steve Ackerman U. of Wisconsin-Madison Meteorological Satellite Studies 1225 West Dayton Street Madison WI 53706 Phone: 608-263-3647 Fax: 608-262-5974 stevea@ssec.wisc.edu

Edgar L. Andreas US Army/CRREL 72 Lyme Road Hanover, NH 03755-1290 Phone: 603-646-4436 Fax: 603-646-4644

eandreas@crrel41.crrel.usace.army.mil

Mr. James L. Barrilleaux NASA DFRC ER-2 Flight Operations Mail Stop 1623H Edwards, CA 93523 Phone: 805-258-7595 Fax: 805-277-7746

james\_barrilleaux@mail.dfrc.nasa.gov

Dr. Darrel Baumgardner NCAR ATD/RAF PO Box 3000 Boulder, CO 80307-3000 Phone: 303-497-1054 Fax: 303-497-1092 darrel@ncar.ucar.edu Mr. Henry T. Boynton

**NCAR** 

Research Aviation Facility 10800 West 120th Avenue Broomfield, CO 80020

Phone: 303-497-1057 Fax: 303-497-1092 boynton@ucar.edu

Michael D. Bray NASA LaRC

ISSD - Communications & Comp. Syst. Branch

Mail Stop 124 Building 1268 Room 2044

Hampton, VA 23681-2199 Phone: 757-864-7359

Fax: 757-864-7605 m.d.bray@larc.nasa.gov

Dr. Christopher L. Brest

SSAI Goddard Institute for Space Studies

2880 Broadway

New York, NÝ 10025 Phone: 212-678-5565 Fax: 212-678-5552 clclb@giss.nasa.gov

Dr. Christopher S. Bretherton University of Washington

Department of Atmospheric Sciences

Box 351640

Seattle, WA 98195-1640 Phone: 206-685-7414 Fax: 206-685-9302

breth@atmos.washington.edu

Dr. Stephen B. Brooks

NOAA ATDD

PO Box 2456

Oak Ridge, TN 37831-2456

Phone: 423-576-1233 Fax: 423-576-1327 brooks@atdd.noaa.gov Dr. Anthony Bucholtz University of California-San Diego Scripps Institution of Oceanography Mail Code 0242 Atmospheric Research Laboratory 9500 Gilman Drive La Jolla, CA 92093

Phone: 619-534-9621 Fax: 619-534-7452 abucholtz@ucsd.edu

Mr. Kenneth A. Campana NOAA/Environmental Modeling Center Global Modeling Branch W/NP23 NOAA Science Center 5200 Auth Road, Room 207 Camp Springs, MD 20746 Phone: 301-763-8000, ext. 7228

Fax: 301-763-8545 kcampana@sun1.wwb.noaa.gov

Ms. Julie M. Caron University of Colorado Program in Atmospheric and Oceanic Sciences Campus Box 311 Boulder, CO 80309-0311 Phone: 303-492-1244 Fax: 303-492-3524

Dr. Donald J. Cavalieri NASA GSFC Oceans and Ice Branch Mail Stop 971.0 Bldg 22, Rm 266 Greenbelt, MD 20771 Phone: 301-286-2444 Fax: 301-286-0240 don@cavalieri.gsfc.nasa.gov

caron@cloud.colorado.edu

Mr. Roy W. Chesson SAIC NASA LaRC FIRE Project Office Mail Stop 927 One Enterprise Parkway Suite 300 Hampton, VA 23666-5845 Phone: 757-827-4686 Fax: 757-825-4968 r.w.chesson@larc.nasa.gov Dr. H. Lawrence Clark National Science Foundation Division of Sciences 4201 Wilson Boulevard OCE Room 725 Arlington, VA 22230 Phone: 703-306-1584 Fax: 703-306-0390 hclark@nsf.gov

Dr. Josefino C. Comiso NASA GSFC Mail Stop 971 Building 22, Room 264 Greenbelt, MD 20771 Phone: 301-286-9135 comiso@joey.gsfc.nasa.gov

Dr. James E. Conel Jet Propulsion Laboratory Mail Stop 169-237 4800 Oak Grove Drive Pasadena, CA 91109 Phone: 818-354-4516 Fax: 818-393-4619 jconel@jord.jpl.nasa.gov

Mr. Ted S. Cress
Battelle Pacific Northwest Laboratory
Global Studies Program
K9-38
3200 Q Avenue
PO Box 999
Richland, WA 99352
Phone: 509-375-6964
Fax: 509-372-6247
ts\_cress@pnl.gov

Dr. Robert J. Curran NASA HQ Office of Earth Science Mail Code YS Office 082 Washington, DC 20546 Phone: 202-358-1432 Fax: 202-358-2771 rcurran@hq.nasa.gov Dr. Judith A. Curry University of Colorado Department of Aerospace Engineering Sciences Campus Box 429 Boulder, CO 80309

Phone: 303-492-5733 Fax: 303-492-2825 curryja@cloud.colorado.edu

Dr. Thomas B. Curtin Office of Naval Research Ocean Processes and Prediction Divison Code ONR 322 OM 800 North Quincy Street Room 428-1 Arlington, VA 22217-5660

Phone: 703-696-4119 Fax: 703-696-3390 curtint@onr.navy.mil

Mr. Stephan R. de Roode University of Utrecht Institute for Marine and Atmospheric Research Princetonplein 5 3584 CC Utrecht The Netherlands Phone: 31 30 253 2815

Phone: 31 30 253 2815 Fax: 31 30 254 3163 s.r.deroode@fys.ruu.nl

Dr. Anthony Del Genio Goddard Institute for Space Studies 2880 Broadway New York, NY 10025

Phone: 212-678-5588 Fax: 212-678-5552 adelgenio@giss.nasa.gov

Dr. Peter G. Duynkerke University of Utrecht Institute for Marine and Atmospheric Research Princetonplein 5 3584 CC Utrecht The Netherlands Phone: 31 30 253 2909

Phone: 31 30 253 2909 Fax: 31 30 254 3163 nduinker@fys.ruu.nl Dr. Wynn L. Eberhard NOAA

Environmental Technology Laboratory

R/E/ET2

U.S. Department of Commerce

325 Broadway

Boulder, CO 80303 Phone: 303-497-6560 Fax: 303-497-5318

weberhard@etl.noaa.gov

Daniel J. Endres

**NOAA** 

ERL/CMDL, Barrow Observatory

PO Box 888

Barrow, AK 99723 Phone: 907-852-6500 Fax: 907-852-4622 dendres@cmdl.noaa.gov

Dr. Christopher W. Fairall

**NOAA** 

ETL R/E/ET7

325 Broadway

Boulder, CO 80303

Phone: 303-497-3253 Fax: 303-497-6978 cwf@etl.noaa.gov

Ms. Mary R. Farrell

University of Alaska - Fairbanks

Geophysical Institute

PO Box 757320

Fairbanks, AK 99775-7320

Phone: 907-474-7790 Fax: 907-474-7290

fnmrf@uaf.edu

Theodore F. Fathauer National Weather Service 101 12th Avenue, #21

Fairbanks, AK 99701 Phone: 907-456-0247 Fax: 907-456-0381

Dr. Jay S. Fein

**National Science Foundation** 

Atmospheric Sciences

4201 Wilson Boulevard

Arlington, VA 22230

Phone: 703-306-1527

Fax: 703-306-0377

jfein@nsf.gov

Dr. Ronald J. Ferek Office of Naval Research Marine Meteorology Division Code 322 800 North Quincy Street Room 428, BCT-1 Arlington, VA 22217-5660 Phone: 703-696-0518 Fax: 703-696-3390

ferekr@onr.navy.mil

Dr. Charles W. Fowler
University of Colorado
Colorado Center for Astrodynamics Research
Campus Box 431
ECNT-218
AERO/CCAR
Boulder, CO 80309-0431
Phone: 303 492 0975

Phone: 303-492-0975 Fax: 303-492-2825 cfowler@frodo.colorado.edu

Dr. Jennifer A. Francis Rutgers University Institute of Marine and Coastal Sciences 71 Dudley Road New Brunswick, NJ 08903-8521

Phone: 732-932-7684 Fax: 732-932-3036 francis@imcs.rutgers.edu

Dr. Hermann E. Gerber Gerber Scientific Inc. 1643 Bentana Way Reston, VA 22090 Phone: 703-742-9844 Fax: 703-742-3373 gerber@access.digex.net

Kraig Gilkey National Weather Service 101 12th Avenue, #21 Fairbanks, AK 99701 Phone: 907-456-0380 Fax: 907-456-0381

Dr. Sivaprasad Gogineni NASA HQ Code YS 300 E Street SW Room 5N21 Washington, DC 20546 Phone: 202-358-0746 Fax: 202-358-2770

# sgoginen@hq.nasa.gov

Dr. Thomas C. Grenfell University of Washington Department of Atmospheric Sciences Box 351640 Seattle, WA 98195-1640 Phone: 206-543-9411 Fax: 206-685-7160 tcg@atmos.washington.edu

Robert W. Grumbine NOAA/NWS W/NP21 NOAA Science Center 5200 Auth Road, Room 209 Camp Springs, MD 20746-4304 Phone: 301-763-8000, ext. 7214 rmg3@polar.wwb.noaa.gov

Dr. Ismail Gultepe Atmospheric Environment Service - Canada Cloud Physics Research Division 4905 Dufferin Street Downsview, Ontario M3H 5T4 Canada

Phone: 416-739-4607 Fax: 416-739-4211 ismail@armph3.tor.ec.gc.ca

Dr. John Hallett
Desert Research Institute
Atmospheric Sciences Center
Box 60220
Reno, NV 89506-0220
Phone: 702-677-3116
Fax: 702-677-3157
hallett@rigel.physics.unr.edu

Dr. Qingyuan Han University of Alabama in Huntsville Atmospheric Science Department Huntsville, AL 35899 Phone: 205-922-5754 Fax: 205-922-5755 han@atmos.uah.edu CW3 Matthew J. Hansen US Army Commander of Airfield Operations Building 1558 Gaphne Road Fort Wainwright Fairbanks, AK 99703

Phone: 907-353-6514 Fax: 907-353-9941

afcdr@wainwright-emh1.army.mil

Ms. Erika N. Harper SAIC NASA LaRC FIRE Project Office Mail Stop 927 One Enterprise Parkway Suite 300 Hampton, VA 23666-5845 Phone: 757-827-4859 Fax: 757-825-4968 e.n.harper@larc.nasa.gov

Mr. Andy Heiberg University of Washington Polar Science Center Applied Physics Laboratory 1013 NE 40th Street Seattle, WA 98105-6698 Phone: 206-543-1348 Fax: 206-543-3521 heiberg@apl.washington.edu

Prof. Peter V. Hobbs University of Washington Department of Atmospheric Sciences Box 351640 Seattle, WA 98195-1640 Phone: 206-543-6027 Fax: 206-685-7160 phobbs@atmos.washington.edu

Ms. Robbie E. Hood NASA MSFC Global Hydrology and Climate Center HR20 Huntsville, AL 35812 Phone: 205-922-5959 Fax: 205-922-5723 robbie.hood@msfc.nasa.gov Dr. James G. Hudson Desert Research Institute Atmospheric Sciences Center PO Box 60220 Reno, NV 89506-0220

Phone: 702-677-3119 Fax: 702-677-3157 hudson@sage.dri.edu

Ms. Janet M. Intrieri NOAA/ETL R/E/ET2 325 Broadway Boulder, CO 80303 Phone: 303-497-6594 Fax: 303-497-5318 jmi@etl.noaa.gov

Dr. George A. Isaac Atmospheric Environment Service Cloud Physics Research Division ARMP 4905 Dufferin Street Downsview, Ontario M3H 5T4 Canada

Phone: 416-739-4605 Fax: 416-739-4211 george.isaac@ec.gc.ca

Dr. Christian Jakob ECMWF Shinfield Park Reading, Berks RG2 9AX United Kingdom Phone: 44 118 949 2735 Fax: 44 118 986 9450

cjakob@ecmwf.int

Dr. Michael D. King NASA GSFC Earth Sciences Directorate Code 900 Greenbelt, MD 20771 Phone: 301-286-8228 Fax: 301-286-1738 king@climate.gsfc.nasa.gov Dr. Yefim L. Kogan University of Oklahoma CIMMS Energy Center, Room 1110 100 East Boyd Norman, OK 73019-0628 Phone: 405-325-6078 Fax: 405-325-7614 YKOGAN@ou.EDU

Dr. Sonia M. Kreidenweis Colorado State University Department of Atmospheric Science Fort Collins, CO 80523-1371

Phone: 970-491-8350 Fax: 970-491-8449

soniak@aerosol.atmos.colostate.edu

Prof. Steven K. Krueger University of Utah Department of Meteorology 819 W. B. Browning Building Salt Lake City, UT 84112 Phone: 801-581-6136 Fax: 801-585-3681 krueger@ucar.edu

Ms. Krista Laursen NCAR Research Aviation Facility PO Box 3000 Boulder, CO 80307-3000 Phone: 303-497-1031 Fax: 303-497-1092 krista@ncar.ucar.edu

Mr. Richard Lawford NOAA Office of Global Programs Mail Stop GP 1100 Wayne Avenue Silver Spring, MD 20910 Phone: 301-427-2089 Fax: 301-427-2082 lawford@ogp.noaa.gov

Dr. R. Paul Lawson SPEC Inc. 5401 Western Avenue, Suite B Boulder, CO 80301 Phone: 303-449-1105 Fax: 303-449-0132 plawson@specinc.com Dr. Michael T. Ledbetter National Science Foundation 4201 Wilson Boulevard Arlington, VA 22230 Phone: 703-306-1029 Fax: 703-306-0109 mledbett@nsf.gov

Dr. Donald H. Lenschow NCAR MMM Division PO Box 3000 Boulder, CO 80307-3000 Phone: 303-497-8903 Fax: 303-497-8171 lenschow@ucar.edu

Dr. Dan Lubin University of California - San Diego California Space Institute 9500 Gilman Drive La Jolla, CA 92093-0221 Phone: 619-534-6369 Fax: 619-534-7452 dlubin@ucsd.edu

Mr. Peter W. Lunn DOE Environmental Sciences Division ER-74 19901 Germantown Road Germantown, MD 20874-1290 Phone: 301-903-4819 Fax: 301-903-8519 peter.lunn@oer.doe.gov

Mr. Douglas D. MacGowan Sterling Software NASA ARC Mail Stop 204-14 Building 204 Room 100 Moffett Field, CA 94035-1000 Phone: 650-604-3842 Fax: 650-604-0978 d\_macgowan@nsipo.arc.nasa.gov

Dr. Roger Marchand Pennsylvania State University Department of Meteorology 503 Walker Building University Park, PA 16802 Phone: 804-863-4722 roj@essc.psu.edu Dr. James A. Maslanik University of Colorado Colorado Center for Astrodynamics Research Campus Box 431 Boulder, CO 80309 Phone: 303-492-8974 jimm@northwind.colorado.edu

Mr. David S. McDougal NASA LaRC ASD - Atmospheric Studies Branch Mail Stop 483 Hampton, VA 23681-2199 Phone: 757-864-5832 Fax: 757-864-5841 d.s.mcdougal@larc.nasa.gov

Miles G. McPhee McPhee Research Company 450 Clover Spring Road Naches, WA 98937 Phone: 509-658-2575 miles@wolfenet.com

Dr. Martin J. Miller ECMWF Shinfield Park Reading, Berks RG2 9AX United Kingdom Phone: 44-734-499070 Fax: 44-734-869450 pab@ecmwf.int

Dr. Patrick Minnis NASA LaRC ASD - Radiation Sciences Branch Mail Stop 420 Hampton, VA 23681-2199 Phone: 757-864-5671 Fax: 757-864-7996 p.minnis@larc.nasa.gov

Larry Montoya Airborne Science Branch Mail Code 1623H NASA DFRC P.O. Box 273 Edwards, CA 93523 Phone: 805-258-2775 Fax: 805-277-7746 Imontoya@dfrc.nasa.gov Mr. James Moore NCAR UCAR Office of Field Project Support PO Box 3000 Boulder, CO 80307-3000

Phone: 303-497-8635 Fax: 303-497-8158 jmoore@ucar.edu

Dr. Richard E. Moritz
University of Washington
Applied Physics Laboratory
Box 355640
Polar Science Center
1013 NE 40th Street
Seattle, WA 98105-6698
Phone: 206-543-8023
Fax: 206-543-3521
dickm@apl.washington.edu

Louis Nguyen AS&M NASA LaRC Mail Stop 936 One Enterprise Parkway Suite 300 Hampton, VA 23666-5845 Phone: 757-827-4636 Fax: 757-825-8659 l.nguyen@larc.nasa.gov

Mr. John O. Olson CSC NASA LaRC EOSDIS Langley DAAC Mail Stop 157B Hampton, VA 23681-2199 Phone: 757-864-8609 or 8656 Fax: 757-864-8807 j.o.olson@larc.nasa.gov

Ms. Judith Opacki
University of Washington
Department of Atmospheric Sciences
Box 351640
Cloud and Aerosol Research
Seattle, WA 98195-1640
Phone: 206-543-6026
Fax: 206-685-7160

jopacki@atmos.washington.edu

Brad W. Orr NOAA ERL/WPL 325 Broadway Boulder, CO 80303 Phone: 303-497-5152 Fax: 303-497-5152 bwo@etl.noaa.gov

Dr. James E. Overland NOAA/PMEL 7600 Sand Point Way NE Building 3 Seattle, WA 98115-0070 Phone: 206-526-6795 Fax: 206-526-6485 overland@pmel.noaa.gov

Dr. Donald K. Perovich US Army/CRREL Snow and Ice Division 72 Lyme Road Hanover, NH 03755-1290 Phone: 603-646-4255 Fax: 603-646-4644 perovich@crrel.usace.army.mil

Dian Petersen University of Washington Applied Physics Laboratory Box 355640 631 Henderson Hall 1013 NE 40th Street Seattle, WA 98105 Phone: 206-543-6613 Fax: 206-543-3521 dian@apl.washington.edu

Dr. Charles R. Philbrick
Pennsylvania State University
Department of Electrical Engineering
315 Electrical Engineering East
University Park, PA 16802
Phone: 804-865-2975
Fax: 804-863-8457
crp3@psu.edu

Dr. Peter Pilewskie NASA ARC Atmospheric Physics Research Division Mail Stop 245-4 Moffett Field, CA 94035

Phone: 650-604-0746 Fax: 650-604-3625

ppilewskie@mail.arc.nasa.gov

Dr. Robert Pinkel University of California-San Diego Scripps Institution of Oceanography Marine Physical Laboratory 9500 Gilman Drive La Jolla, CA 92093-0213

Phone: 619-534-2056 Fax: 619-534-7132 rpinkel@ucsd.edu

Dr. James O. Pinto University of Colorado Program in Atmospheric and Oceanic Science Box 311 Boulder, CO 80309-0311 Phone: 303-492-0897 pinto@monsoon.colorado.edu

Dr. Lawrence F. Radke NCAR PO Box 3000 Boulder, CO 80307-3000 Phone: 303-497-8778 Fax: 303-497-8770 radke@chinook.atd.ucar.edu

Dr. David A. Randall Colorado State University Department of Atmospheric Science Fort Collins, CO 80523-1371 Phone: 970-491-8474 Fax: 970-491-8428

randall@redfish.atmos.colostate.edu

Mr. James L. Raper NASA LaRC ASD - Atmospheric Studies Branch Mail Stop 483 Hampton, VA 23681-2199 Phone: 757-864-8880 Fax: 757-864-5841 j.l.raper@larc.nasa.gov Dr. Henry E. Revercomb University of Wisconsin - Madison Space Science and Engineering Center 1225 West Dayton Street Madison, WI 53705 Phone: 608-263-6758

Fax: 608-262-5974 hankr@ssec.wisc.edu

Mr. Randy Reynolds NASA DFRC Airborne Science Branch Mail Stop 1623H Edwards, CA 93523-0273

Phone: 805-258-7449 Fax: 805-277-7746

randy\_reynolds@mail.dfrc.nasa.gov

Dr. David C. Rogers Colorado State University Department of Atmospheric Science Fort Collins, CO 80523-1371 Phone: 970-491-8667

Fax: 970-491-8449

dcrogers@lamar.colostate.edu

Dr. William B. Rossow Goddard Institute for Space Studies 2880 Broadway New York, NY 10025 Phone: 212-678-5567 Fax: 212-678-5622 clwbr@giss.nasa.gov

Dr. Glenn E. Shaw University of Alaska - Fairbanks Geophysical Institute PO Box 757320 903 Koyukuk Drive Fairbanks, AK 99775-7320

Phone: 907-474-7625 Fax: 907-474-7290 glenn.shaw@gi.alaska.edu Dr. Masataka Shiobara
National Institute of Polar Research
Center for Antarctic Environment Monitoring
9-10 Kaga 1-chome
Itabashi-ku
Tokyo
173
Japan
Phone: 81-3-3962-4740

Fax: 81-3-3962-4914

shio@nipr.ac.jp

Dr. James D. Spinhirne NASA GSFC Code 912.0 Greenbelt, MD 20771 Phone: 301-286-9099 Fax: 301-286-1762 spinhirne@gsfc.nasa.gov

Dr. Knut H. Stamnes University of Alaska - Fairbanks Geophysical Institute PO Box 757320 Fairbanks, AK 99775-7320 Phone: 907-474-7368 Fax: 907-474-7290

Dr. Graeme L. Stephens Colorado State University Department of Atmospheric Science Fort Collins, CO 80523-1371

Phone: 970-491-8541 Fax: 970-491-8449

knut@kaja.gi.alaska.edu

stephens@langley.atmos.colostate.edu

Dr. Pamela L. Stephens National Science Foundation Atmospheric Sciences 4201 Wilson Boulevard Arlington, VA 22230 Phone: 703-306-1528 Fax: 703-306-0377 pstephen@nsf.gov Mr. Harry L. Stern University of Washington Applied Physics Laboratory Box 355640 Polar Science Center 1013 NE 40th Street Seattle, WA 98105-6698 Phone: 206-543-7253 harry@apl.washington.edu

Mr. William D. Strauss

**US** Army

Dir. of Plans, Training, Security & Mobilization

1060 Gaphne Road #6300

Fort Wainwright
Fairbanks, AK 99703
Phone: 907-353-9776
Fax: 907-353-7639

straussw@wainwright-emh1.army.mil

Dr. Matthew Strum
US Army/CRREL
PO Box 35170
Fort Wainwright AK

Fort Wainwright, AK 99703-0170

Phone: 907-353-5183 Fax: 907-353-5142

mstrum@crrel.usace.army.mil

Dr. Si-Chee Tsay NASA GSFC Climate and Radiation Code 913 Greenbelt, MD 20771

Phone: 301-286-9710 Fax: 301-286-1759 tsay@climate.gsfc.nasa.gov

Mr. Walter B. Tucker US Army/CRREL 72 Lyme Road Hanover, NH 03755-1290

Phone: 603-646-4268 Fax: 603-646-4644

wtucker@hanover-crrel.army.mil

Ms. Taneil Uttal

**NOAA** 

Environmental Technology Laboratory

R/E/ET6

325 Broadway

Boulder, CO 80303-3328 Phone: 303-497-6409

Fax: 303-497-6978 tuttal@etl.noaa.gov

Dr. Francisco P. J. Valero University of California - San Diego Scripps Institution of Oceanography Mail Code 0242 Center for Atmospheric Sciences 9500 Gilman Drive La Jolla, CA 92093-0242 Phone: 619-534-8099

Phone: 619-534-8099 Fax: 619-534-7452 fvalero@ucsd.edu

Mr. Carl A. Wales University of Alaska Geophysical Institute Alaska SAR Facility PO Box 757320 Fairbanks, AK 99775-7320 Phone: 907-474-7848 Fax: 907-474-5567

Dr. James R. Wang NASA GSFC Microwave Sensors Branch Code 975 Greenbelt, MD 20771 Phone: 301-286-8949 Fax: 301-268-1762

cwales@images.alaska.edu

wang@sensor.gsfc.nasa.gov

Dr. Qing Wang Naval Postgraduate School Department of Meteorology Code MR/Qg 589 Dyer Road Monterey, CA 93943-5114 Phone: 408-656-5043 Fax: 408-656-3061 qwang@nps.navy.mil

Dr. Shouping Wang Universities Space Research Association Global Hydrology and Climate Center 977 Explorer Boulevard Huntsville, AL 35806 Phone: 205-922-5905 Fax: 205-922-5723

shouping.wang@msfc.nasa.gov

Dr. Ronald M. Welch University of Alabama in Huntsville Atmospheric Science Department Huntsville, AL 35899

Phone: 205-922-5789 Fax: 205-922-5755 ron.welch@atmos.uah.edu

Dr. Bruce A. Wielicki NASA LaRC ASD - Radiation Sciences Branch Mail Stop 420 Hampton, VA 23681-2199 Phone: 757-864-5683

757-864-7996 Fax: b.a.wielicki@larc.nasa.gov

Dr. Donald P. Wylie University of Wisconsin - Madison Space Science and Engineering Center 1225 West Dayton Street Madison, WI 53706 Phone: 608-263-7458 Fax: 608-262-5974 donw@ssec.wisc.edu

Dr. Bernard D. Zak Sandia National Laboratories ARM/NSA/Adjacent Arctic Ocean Project Department 6612 Mail Stop 0755 PO Box 5800 Building 823, Room 3229 Albuquerque, NM 87185-0755 Phone: 505-845-8631 505-844-0116 Fax:

bdzak@sandia.gov

Dr. Qing Yun Zhao NOAA/WWB National Meteorology Center W/NMC2 5200 Auth Road Room 207 Camp Springs, MD 20746-4304 Phone: 301-763-8000 Ext. 7274 301-763-8545 Fax:

wd20cl@next4.wwb.noaa.gov